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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/574,974	04/07/2006	Ram Oron	55219-00013USPX	5932

7590 07/06/2007  
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EXAMINER
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LEUNG, QUYEN PHAN

ART UNIT	PAPER NUMBER
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2874

MAIL DATE	DELIVERY MODE
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07/06/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/574,974

Applicant(s)

ORON ET AL.

Examiner

Quyen P. Leung

Art Unit

2874

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-70 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 18-46 and 55-70 is/are allowed.
- 6) ☒ Claim(s) 1, 12, 14, 17, 47 and 50 is/are rejected.
- 7) ☒ Claim(s) 2-11, 13, 15, 16, 48, 49 and 51-54 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____.                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20060925, 20061115</u> .                                      | 6) <input type="checkbox"/> Other: ____.                          |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- Claim 12 recites the limitation “the scattering core” in claim 12 line 2.

There is insufficient antecedent basis for this limitation in the claim. Did applicant mean –the scattering end tip—instead?

### ***Claim Objections***

Claims 51-52 are objected to because of the following informalities:

- “the method of claim 51” in claim 51 line 1 is an improper dependent claim, not depending upon a previous claim, but itself. Did applicant mean to say instead –the method of claim 50--? Claim 52 is rejected for the same reason as claim 51 by virtue of its dependency to claim 51.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 14, 17, 47, 50 are rejected under 35 U.S.C. 102(b) as being anticipated by Dalgault et al (EP 0 399 660).

Re independent claim 1, Dalgault et al (EP 0 399 660) teaches the claimed invention of an optical hot tip (10) comprising a core (inherent to the fiber 14) that receives the high power optical energy; and a scattering end tip (12,—see col. 5 lines 5-12 for the implication of scattering with the teaching of illumination, heating, vaporization or thermography, as further evidenced by the definition of *scattering* “spreading by diffusion” from wordnet.Princeton.edu/perl/webwn and of *diffusion* “the spontaneous spreading of something such as particles, heat, or momentum” from wn.wikipedia.org/wiki/diffusion) adjacent (see col. 5 lines 45-47 for the teaching of adjacent) to an end of the fiber (14) and containing an absorber (12, see abstract for absorbing teaching) , such that the optical energy is impinged on the absorber, to heat the absorber to a temperature of at least about 100 degrees Celcius (see col. 1 lines 20-24 for the teaching of several hundred degrees Centigrade).

Re independent claim 47, Dalgault et al discloses an optical hot tip for absorbing high optical energy traveling in a fiber, comprising a means (12) for absorbing light (see abstract and col. 5 line 55 through col. 6 line 14 for the teaching of absorbing) from the fiber (14) in a predetermined volume (see col. 5 lines 39-49 for the volume formed to be smoothly curved or rounded ) in order to generate heat.

***Allowable Subject Matter***

Claims 18-46, 55-70 are allowed.

Claims 2-11, 13, 15-16, 48-49, 51-54 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 12 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

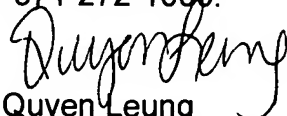
The following is a statement of reasons for the indication of allowable subject matter:

The claims are allowed, because the closest cited prior art fail to teach or fairly suggest the combinations as claimed. Bruce (5,534,000) teaches a laser fiber apparatus having a contact tip (18) and **adjacent** diffuser (i.e. scattering) element (20), but fails to teach or fairly suggest either an absorbing layer, a scattering **core**, or a **first conductive layer adjacent to the end of the fiber such that the optical energy is impinged on the first conductive layer**. Note in col. 5 lines 43-47 the inherently non-conductive diffuser is made by mixing 4 parts of an optical adhesive with 1 part alumina and then cured with ultraviolet light. Ohsawa (5,530,780) teaches a fiber optic laser conducting and diffusion device comprising a scattering core (7') for uniform light distribution and also a resin light diffusion tip (4), but fails to teach an absorbing layer to conduct high power energy away from the scattering core or a first conductive layer adjacent to the end of the fiber such that the optical energy is impinged on the first conductive layer, creating a scattering tip.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quyen P. Leung whose telephone number is (571) 272-8188. The examiner can normally be reached on normally M-F, 6:15 am - 2:45 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on (571) 272-2344. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Quyen Leung  
Primary Patent Examiner  
Group Art Unit 2874

qpl